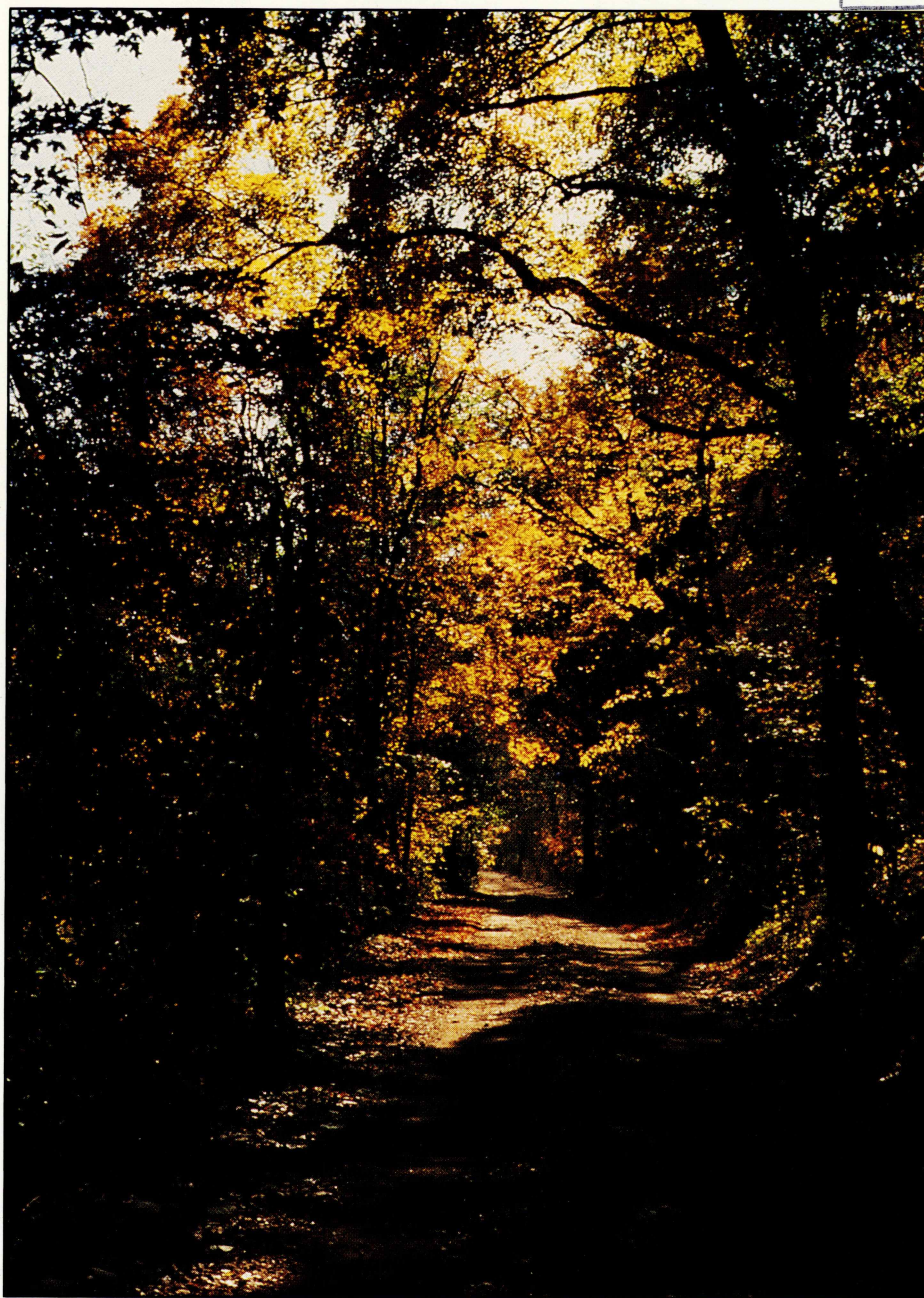


MO  
NR.E: 1:  
987-88

OCT 27 '88

ST. LOUIS COUNTY LIBRARY  
MISSOURI DEPOSITORY

OCT 25 1988



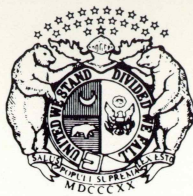
# 1988 ANNUAL REPORT

**EIERA**  
Environmental Improvement and Energy Resources Authority



JOHN ASHCROFT  
Governor

FREDERICK A. BRUNNER  
Director



STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE DIRECTOR  
P.O. Box 176  
Jefferson City, Missouri 65102  
Telephone 314-751-4422

Division of Energy  
Division of Environmental Quality  
Division of Geology and Land Survey  
Division of Management Services  
Division of Parks, Recreation,  
and Historic Preservation



*Dr. Frederick A. Brunner, P.E.  
Director  
Missouri Department of Natural Resources*

Dear Citizens:

The Environmental Improvement and Energy Resources Authority (EIERA) plays an important part in this department's efforts to protect Missouri's environment and promote wise use of energy resources.

In fiscal year 1988, the authority completed a comprehensive study of Missouri's solid-waste-management system. The year-long study indicates that unless the state implements alternative disposal methods such as recycling, curbside source separation, and plastics reduction, Missouri's landfills will be full in nine years. According to the study, the majority of the report's 18 recommendations can be implemented with current statutes and programs.

The EIERA study provides local officials and community leaders with several options in developing practical waste-management systems that will meet the needs of their citizens.

The authority's concern for proper waste-management procedures represents a continuing commitment to provide a clean, safe environment for Missourians to enjoy.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Frederick A. Brunner, Ph.D., P.E.  
Director



# Table of Contents



Letter from William H. Clark, Chairman, Environmental Improvement and Energy Resources Authority	2
In Memorium — James A. Davis and Lenore H. Loeb	3
Members of the EIERA and Biographical Information	4
EIERA Staff	5
The EIERA — An Overview of its History and Purpose	6
The Year in Review	8
EIERA Programs and Financial Services	14
Projects Financed in Fiscal Year 1988	15
Geographical Locations of Projects Financed	16
Summary of Bond Issuances	17
Projects Financed Through Bond Issuances 1973 - 1988	18
Photograph Identification	20

<p><b>Authority</b> <b>General Counsel</b></p> <p>Henry F. Luepke, Jr. Angela Braly</p> <p>Lewis &amp; Rice 611 Olive Street St. Louis, MO 63101</p>	<p>The 1988 Annual Report of the Environmental Improvement and Energy Resources Authority is published as a service to the citizens of the state of Missouri, and as a public record of the activities and programs administered during fiscal year July 1, 1987, through June 30, 1988.</p> <p><b>EIERA</b> Post Office Box 744 Jefferson City, MO 65102 (314) 751-4919</p>	<p><b>Editorial Staff:</b> Writing, editing, and publication coordination were provided by Kenneth Seeney, Office of Public Information, Missouri Department of Natural Resources. Photography was provided by Bill Palmer and Nick Decker, Department of Natural Resources; Marsha Boone, Nixa, Mo.; Bob Rolf, St. Louis; Ollie Schuchard, Holts Summit, Mo.; Jim Visser, St. Louis; City of University City; Household Hazardous Waste Project, Springfield; Midwest Assistance Program; Noranda Aluminum, New Madrid, Mo.; Regional Recycling Program, Kansas City; and St. Joseph Light and Power, St. Joseph.</p>
--	--	--



## A Message from the Chairman

---



**I**n the past fiscal year, the Environmental Improvement and Energy Resources Authority (EIERA), was extremely active in developing programs and projects to protect Missouri's environment and conserve energy resources.

The Missouri Resource Recovery and Feasibility and Planning Study, initiated by EIERA in 1987, indicated that 16,000 tons of trash is collected daily and placed in sanitary landfills that are quickly reaching capacity. Only seven percent of this waste is being recovered, while Missouri has the potential to recover 20 to 30 percent. Citizens, industry, and government must develop and embrace alternatives to land disposal or face a possible waste-disposal dilemma within the next 10 years.

In funding activities, the EIERA approved grants totaling more than \$163,000 to the Springfield-based Household Hazardous Waste Project (HHWP). HHWP will use the funds to develop brochures, slide shows and video tapes, and conduct training sessions that will inform the public in a 23-county area on the safe use, storage, and proper disposal of household hazardous waste.

This past year, loans totaling \$15 million were made available to Missouri communities and rural areas for the construction of wastewater-treatment and sanitary sewage projects through the Construction Advance Program (CAP). The CAP program is a readily accessible financing source, and the funding rates are much lower than those offered by conventional lending institutions.

A similar program initiated by the EIERA in 1985 provided low-cost, long-term financing to 24 Missouri communities over a three-year period. This past summer, those 24 communities and sewer districts

received \$130,730 in rebates. The rebates were in proportion to the loans initially received by the community or district.

Looking ahead to next year, the EIERA is creating financial programs that will assist in developing resource-recovery programs and projects and also provide for increased funding of water and wastewater treatment activities in the state.

I have just completed my first 18 months on the authority, and it has been a challenging experience. During that time, I have had the pleasure of observing two men who displayed objectivity, wisdom, and foresight in reviewing numerous projects presented to the authority — former chairman Lehman Finch and former vice chairman Marvin Young. Both served on the authority for more than four years, and their professional expertise will be missed.

The authority and its staff wish you success and prosperity in the coming year.

Sincerely,

ENVIRONMENTAL  
IMPROVEMENT  
AND ENERGY RESOURCES  
AUTHORITY

William H. Clark  
Chairman



OCT 25 1988

## In Memorium

---



**James A. Davis**  
1905 - 1988

### **James A. Davis**

As first chairman and longest-serving board member, Jim Davis had a profound impact on the EIERA. He guided the authority through its formative years and helped build the confidence and respect in the financial and industrial community the authority now enjoys. To those who knew him, Jim Davis was the EIERA. He was always available and willing to assist even in retirement.

### **Lenore H. Loeb**

The enthusiasm and energy generated by Lenore Loeb in support of EIERA projects was unparalleled. Her personal philosophy embodied the idea that the authority could take an active role in environmental management and energy-conservation projects. She provided leadership and guidance that gave direction to this role. Her involvement in community organizations and public-service activities made her an exceptional EIERA board member. The authority will strive to maintain the high standards she established.



**Lenore H. Loeb**  
1927 - 1987



# Members of the EIARA

---



## **William H. Clark, *Chairman***

William Clark has been president of the Urban League of Greater Kansas City since 1977. The Urban League offers programs that focus on career education, community planning and research, employment, and training.

Clark is past president of the United Way Area Executives Association and serves on several boards, including the Greater Kansas City Chamber of Commerce, Truman Medical Center, NAACP, Starlight Theatre, and Kansas City Power and Light.

Additionally, he has been a member of the Advisory Council-National Alliance of Business and the Private Industry Council.

Clark earned a bachelor of arts degree in political science and economics from Indiana University. He received a master of divinity degree from Central Theological Seminary, Indiana, and the doctor of divinity degree from Central America University in Missouri. He holds the doctor of laws degree from Monrovia College, Liberia, and has studied at the Harvard Graduate School of Business.

Clark was appointed to the authority in January 1987. He and his wife have one son; they reside in Lee's Summit.

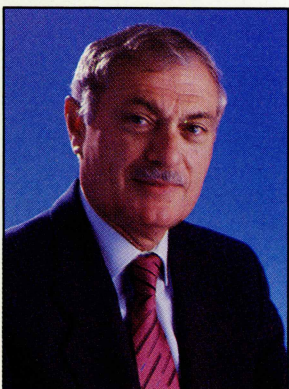
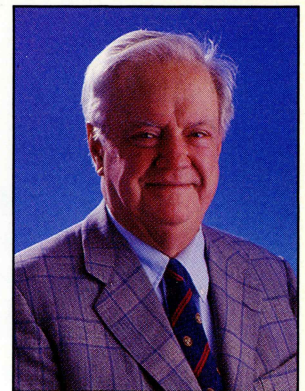
## **J. Glennon Travis, *Vice Chairman***

Glen Travis was appointed to the authority on February 5, 1986. He is currently president and board chairman of the Wentzway Corp., a St. Louis-based land development company. From 1961 to 1967, he was chief executive officer for the Multiplex Corp., a manufacturing firm employing 250 people.

Travis graduated cum laude from Spring Hill College, Mobile, Alabama, with a degree in economics. A military veteran, he served four years in the U.S. Navy, earning the rank of lieutenant commander.

Travis is involved in a number of professional and civic activities including membership on the boards of the St. Louis Priory, Boatmen's Plaza Bank, and Affinetic Corp.

Travis and his wife have three sons and a daughter.



## **David R. Goller, *Secretary-Treasurer***

David Goller was appointed to the authority in August 1987, by Gov. John Ashcroft to serve a three-year term. He was elected secretary-treasurer in October, 1987.

Goller is a partner in the Jefferson City law firm of Goller, Lake & Kuebler. He is a member of the American, Missouri, and Cole County bar associations.

Involved in numerous community activities, Goller is a member of the Jefferson City Chamber of Commerce and the Cole County Planning Commission. He also serves on the board of directors of the Exchange National Bank and the local chapter of the American Red Cross. He is a past board member of the Memorial Community Hospital and the Jefferson City YMCA.





**Robert J. Baudendistel, Member**

Robert Baudendistel was appointed to the authority on February 27, 1986, for a three-year term. He is an investor who has been engaged in banking and real estate ventures since 1957. He served as an officer in the U.S. Army from 1955 to 1957.

Baudendistel is a senior partner in Fox Associates, the firm that manages St. Louis' Fox Theater. Additionally, he is board vice chairman for Mark Twain Bancshares, Inc. and St. Anthony's Medical Center, and is a member of the St. Louis Regional Commerce and Growth Association.

Baudendistel lives in St. Louis County and is a member of the Roman Catholic Church; he and his wife have two daughters.

**H. Dwight Douglas, Member**

Dwight Douglas is a partner in the Neosho law firm of Douglas, Douglas, and Johnson. He was appointed to the authority for a three-year term by Gov. John Ashcroft.

Douglas received his bachelor of arts and juris doctorate degrees from the University of Missouri-Columbia. A Distinguished Military Graduate, he was awarded the U.S. Army's Vietnam Service Medal for meritorious service in Thailand.

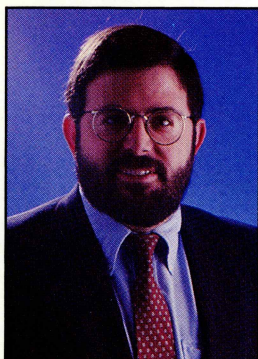
A former member of the Governor's Dioxin Task Force (1983), Douglas is involved in various civic and community activities. He is a past member and former president of the Southwest Missouri State University Board of Regents and a former member of the Neosho City Council. He also provides legal advice for a drug-abatement organization that assists law-enforcement agencies.

Douglas is a member of the Missouri Bar, the Missouri Trial Lawyers Association, the Association of Trial Lawyers of America, and the Missouri Municipal and Associate Judges Association.



---

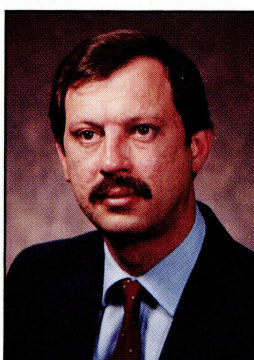
## EIERA Staff



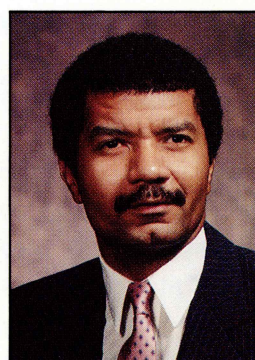
**Stephen M. Mahfood**  
*Director*



**Marie Colvin**  
*Administrative Assistant*



**Tom Welch**  
*Project Director*



**Kenneth Seeney**  
*Dept. of Natural Resources  
Media and Public Affairs*



**Faye Alberts**  
*Secretary*



# The EIERA —

## An Overview of its History and Purpose

---



***One important advantage of EIERA financing is that most programs are arranged through low-cost funding alternatives, thereby substantially reducing project costs.***

**T**he Environmental Improvement and Energy Resources Authority (EIERA), an independent five-member agency, was created by the Missouri legislature in 1972. The authority's mandate is to provide low- or no-cost financing for projects that would reduce, control, and prevent environmental pollution, and to encourage research and development of energy alternatives while promoting economic development.

Legislation in the early 1980s transferred the EIERA to the Missouri Department of Natural Resources and added major new responsibilities to the authority's operations.

Although the EIERA's traditional method of financing has been through issuance of tax-exempt-interest industrial revenue bonds, the authority's mandate is broad. It ranges from financing projects through tax-exempt bonds to making low-cost loans and offering construction financing, to conducting studies and also providing technical assistance in the field. EIERA staff also meets with organizations and public entities to discuss available programs that would be beneficial to their goals and objectives.

Whether it's a large or small business, a city, county or municipality, port or bridge authority, the EIERA has shown an interest in providing assistance for pollution-control or energy-development projects.

The EIERA authorized its first bond project in December 1973 and since that date has issued tax-exempt bonds, notes, and commercial paper in excess of \$1.8 billion. The bonds are repayable solely by the entities that construct the projects; the state of Missouri does not guarantee repayment. Since the authority issues the bonds and because the bonds meet certain requirements in the Internal Revenue Code, interest from the bonds is exempt from federal income taxes.

The EIERA's ability to offer tax-free financing is now substantially affected by prevailing interest rates and the Tax Reform Act passed by Congress in 1986. Until the financial community fully adapts to these changes, it will continue to be difficult to create a workable atmosphere for tax-exempt project financings.

The EIERA has also developed a number of innovative programs and projects. Two of these have been developed to assist communities in meeting wastewater-treatment and



sanitary sewage guidelines. The Grant Anticipation Note (GAN) program, which began in 1982, provides low-cost construction financing for projects that will receive funding from the U.S. Environmental Protection Agency. The second program, known as the Construction Advance Program (CAP), also provides low-cost construction financing for communities that have arranged Farmers Home Administration loans.

In both cases, the EIERA issues bonds, and then loans the proceeds to applicants for construction. This simplifies the initial project phase and aids in reducing overall project costs. If managed as in the past, these arrangements become either low-interest or interest-free loans.

Additional programs and projects that have been developed include:

- A statewide waste exchange to assist Missouri manufacturers;
- Funding a household hazardous waste education program for southwest Missouri;
- Development of a seven-volume statewide study of solid-waste issues, and recommendations for possible implementation at the state, regional, or local levels;
- Development of a statewide survey to determine the public's views on solid-waste-management issues;
- An education and training program to promote waste minimization and energy conservation in Missouri



business;

- Funding of an innovative soil and water conservation district demonstration project;
- Funding of a pilot recycling project in Kansas City;
- Funding a program to assist small communities in managing their water and wastewater programs;
- Funding local studies to determine feasibility of environmental and energy-development activities; and
- Conducting studies on hazardous-waste issues for large and small-quantity generators and households.

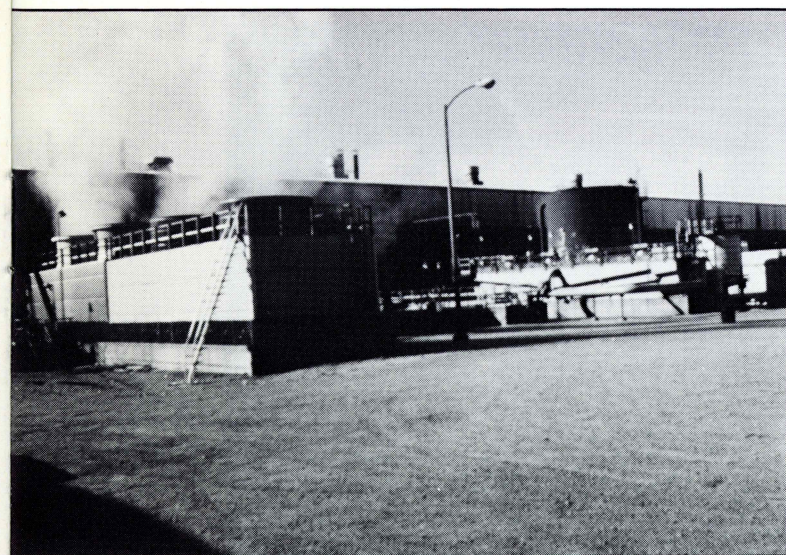
An ongoing task of the EIERA is to develop alternative methods of financing for environmental programs and energy-development projects.

Financing may be obtained for solid-waste, sewage, and water-pollution control projects and facilities. Also considered for assistance are projects that focus on energy conservation through the use of wind, water, and solar power, synthetic fuels, and energy produced from Missouri coal, heavy oil, and tar sands. Other requirements are established as programs develop.

One important advantage of EIERA financing is that most programs are arranged through low-cost funding alternatives, thereby substantially reducing project costs.

Because of the legislative mandate to provide assistance, the EIERA does not perform a regulatory role. The authority's financial programs and assistance are, therefore, available only upon request. The authority is completely self-supporting, and the fees it charges to applicants for financing are sufficient to pay the authority's operating expenses.

The Environmental Improvement and Energy Resources Authority continues to benefit Missourians by maintaining and promoting high standards for environmental management. These standards are met by financing programs and projects that control, reduce, or eliminate pollution, while encouraging the wise use of the state's natural resources for energy development.





# The Year in Review

In the past fiscal year, the Environmental Improvement and Energy Resources Authority has continued to provide financial assistance to many Missouri businesses, communities, and individuals, and has provided information and consultation for more than 400 inquiries.

This past year, the authority embarked on some of its most ambitious undertakings. These include a number of innovative new projects, continuation of projects, studies, conference sponsorships and input on key state, national, and international environmental and energy issues.

## New Projects

In 1987, the authority began funding the Household Hazardous Waste Project in cooperation with Southwest Missouri State University. This project was developed to inform consumers and small businesses of the proper way to handle, store, and dispose of small amounts of typical household hazardous waste such as

cleaners, solvents, paint, and fuel. This joint venture was awarded a first-year grant of more than **\$63,000** and recently was awarded a second-year grant of more than **\$100,000**.

In a related project, the authority received **\$46,778** out of a total project cost of **\$66,283** from the Department of Natural Resources' oil-overcharge program for development of a Waste-Minimization through Energy Conservation Training Program. This ongoing and highly successful project is reaching both small and large businesses. It is providing information and offering management techniques to develop in-plant waste-minimization and reduction programs through a series of workshops across the state.

The authority recently approved a **\$70,095** grant for the Wright County Soil and Water Conservation District to fund demonstration projects. These projects will demonstrate to farmers ways to protect water quality and retain soil by using



## Governor

**John Ashcroft . . .**

***"Many of the state's valuable resources are being covered up at landfills, and only a small percentage of our trash is recycled."***



**H·H·W·P**

Household  
Hazardous  
Waste  
Project

Southwest Missouri State University



innovative waste-management techniques. Also included are funds for pumping and mechanical equipment to be used at the demonstration site.

In 1988, the authority approved and has now made available through its Construction Advance Program (CAP) more than **\$15,000,000** in low-cost financing. These funds are available to Missouri communities, and to water and wastewater districts with populations under 10,000 for construction of water-, wastewater- and sewage-treatment facilities. This program, developed in cooperation with the Farmers Home Administration, attempts to alleviate the problems of obtaining construction financing.

The authority, in connection with the CAP program, issued loan rebates to 24 Missouri communities, or to water and/ wastewater districts, totaling more than **\$130,000**. The funds were available because the EIARA's structure allows the authority to build interest on money

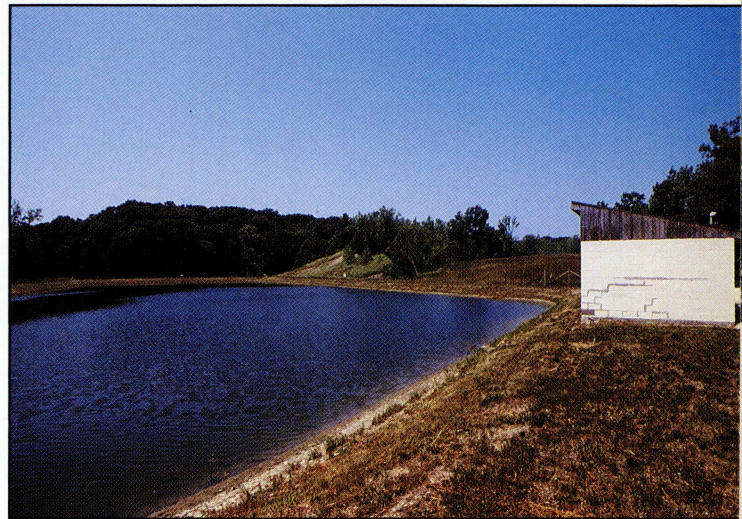
invested. Good money management and investment, therefore, allowed the 24 communities to receive interest-free loans for their projects; a rebate was issued in proportion to the original loan amount.

### Studies and Surveys

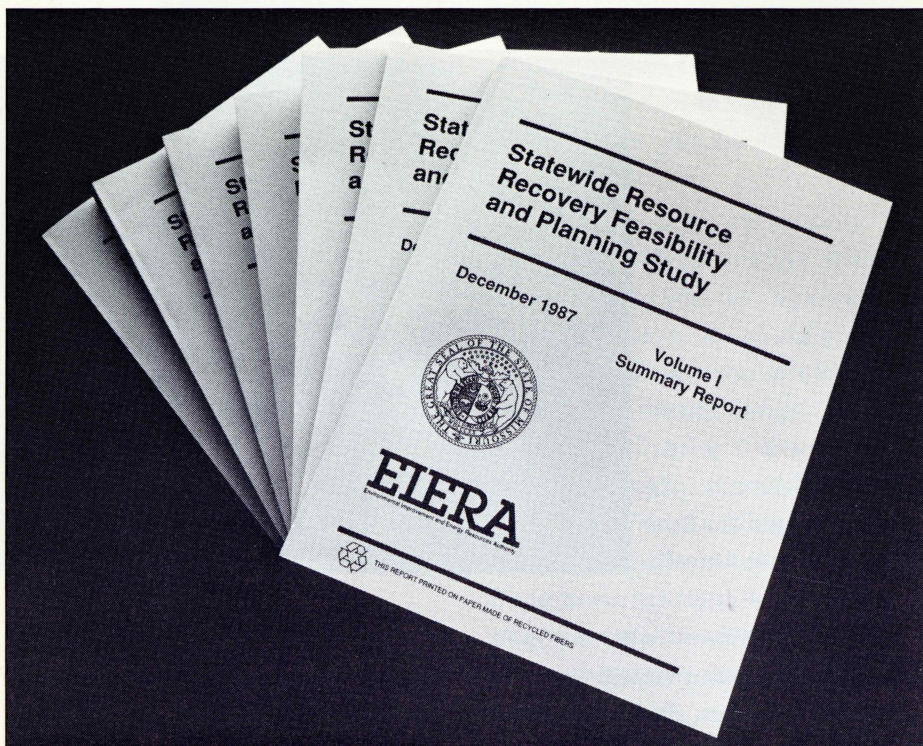
In 1987, the EIARA funded a **\$37,000**

statewide public-opinion survey to determine concerns about solid-waste disposal. The purpose of the survey was to generate significant data necessary to set priorities and determine the direction of solid-waste planning and management activities. This survey provided the first in-depth study of Missourians' attitudes towards solid-waste disposal; it indicated that there is strong support for developing alternative methods to present disposal options, particularly land disposal.

Following this survey, the authority hired a consultant who was directed to develop an in-depth study aimed at evaluating solid-waste issues and the state's potential for developing resource-recovery alternatives. Governor John Ashcroft emphasized the importance of the study: "Many of the state's valuable resources are being covered up at landfills, and only a small percentage of our trash is recycled." The Resource Recovery and







Feasibility Project focused upon four tasks:

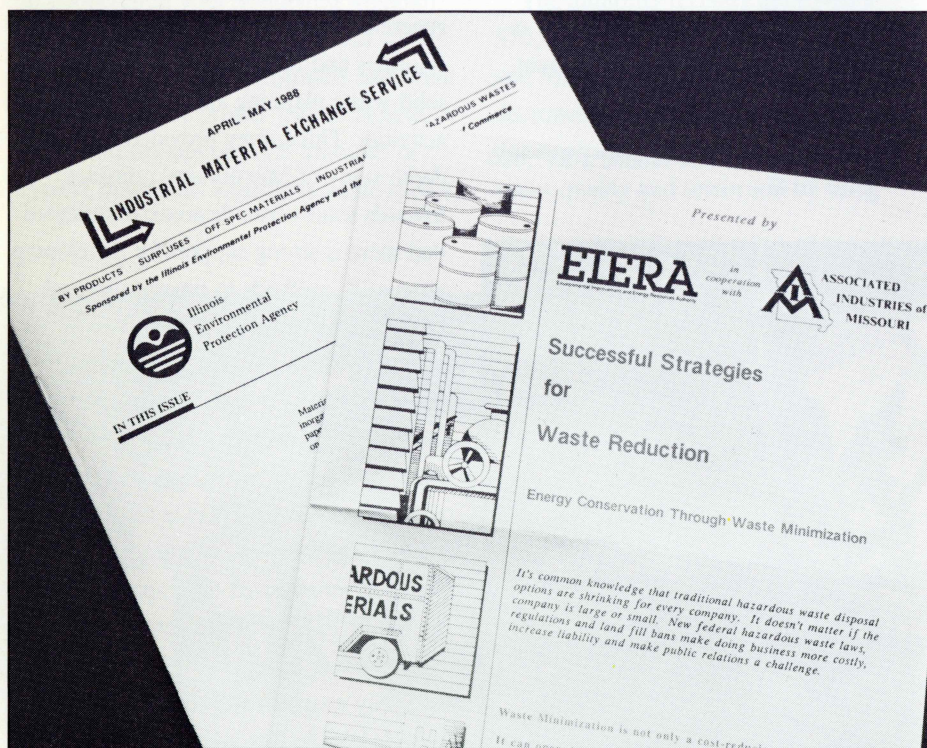
1. to determine the amount of solid waste produced and current disposal methods;
2. to determine potential markets for resource-recovery materials;
3. to evaluate state laws and policies that discourage or encourage resource recovery; and
4. identify optimum market conditions to make resource recovery feasible.

The seven-volume report, which cost almost **\$500,000**, recommended that the state concentrate on programs that emphasize curbside source separation, recycling, plastics reduction, and incentive grants for developing projects at the local level. Most of the recommendations could be implemented by using current statutes and programs. This study has been the most comprehensive examination of Missouri's solid-waste system; it required about 75 percent of the staff's time and additional efforts by volunteer personnel.

## Ongoing Projects

The authority continues to support and fund ongoing projects. Many small communities do not have professional staff and cannot afford consultants to deal with their rapidly deteriorating waste- and wastewater-treatment systems. As a result, the EIERA directed the Midwest Assistance Project to develop an ongoing, Missouri-based program to address these problems.

The Missouri Assistance Project



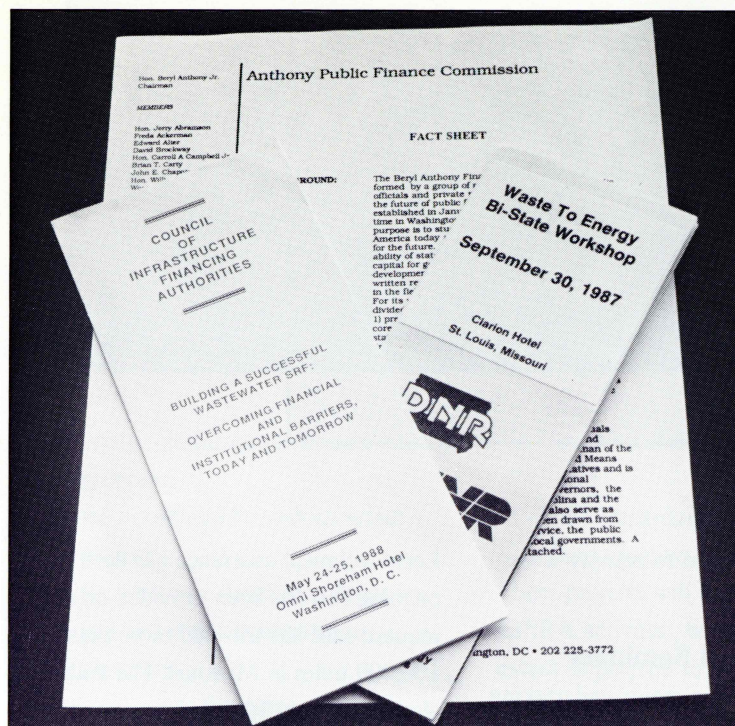


(MAP), funded by a **\$65,000** grant, was first developed in 1986. MAP helps small communities to manage their water- and wastewater-treatment systems and to comply with U.S. Environmental Protection Agency regulations. The authority continues to support this program.

The authority also continues to provide a waste-exchange option for Missouri businesses through its cooperative agreement with the Industrial Material Exchange Service in Springfield, Illinois. This cooperative program provides direct technical assistance and computerized listing of wastes available for distribution to Missouri manufacturers. This is a unique opportunity to reduce waste; in some cases, one company's waste may become another's raw material. For Missouri, the IMES/EIERA agreement will become even more important in the future because of a trend toward waste-reduction and recycling as outlined in the 1984 amendments to the Resource Conservation and Recovery Act.

The exchange also will allow Missouri companies to reduce operating costs. By trading wastes through the exchange instead of hauling them to disposal facilities, companies may lower disposal and transportation costs.

The authority also has maintained its Grant Anticipation Note (GAN) Program. The GAN program has provided ongoing construction financing for those districts or communities receiving EPA water and sewer grants. The most recent program was issued in the amount of **\$65,000,000**. It is hoped that a new program can be







developed and adopted to comply with the new tax laws.

### Conferences and Seminars

Conferences were a major undertaking for the authority in fiscal year 1988. The EIERA presented a conference on solid waste issues in cooperation with the Missouri Department of Natural Resources' Division of Energy and the Illinois Department of Energy and Natural Resources. This highly successful conference, which attracted more than 150 participants, laid the groundwork for promotion of solid waste alternatives in Missouri and Illinois.

The EIERA also hosted the annual meeting of the Council of Pollution Control Financing Agencies (CPCFA). EIERA director Stephen Mahfood has been president of CPCFA and led this national organization in its exploration of financing environmental improvements.

### Staff Contributions

Other involvement by the authority and its members and staff have been extensive.

Local technical assistance has been ongoing and has been provided on request; staff has traveled more than 100,000 miles in Missouri. The authority also has been called upon to provide support to the German Marshall Fund on Solid Waste Issues, and staff has

contributed to the development of a joint U.S.-European project to determine appropriate waste alternatives. EIERA director Stephen Mahfood also was invited to present his views on waste minimization at the European Environmental Technology Conference in Amsterdam, Holland, in midsummer 1987.

Other important contributions include the director's participation in the National Governors Association Waste Minimization Advisory Group and the House Ways and Means Committee (Anthony Commission) on Public Finance. As a member of the Anthony Commission, EIERA Director Steve Mahfood will be making recommendations on appropriate changes in national tax laws to promote development of infrastructure financing





mechanisms.

Administrative assistant Marie Colvin has recently completed a year's term as president of the local chapter of Professional Secretaries International. In addition, Ms. Colvin has been active in Women in Energy, a national organization that promotes all energy resources and encourages exchange of information on energy-related issues.

Also, Kenneth Seeney, EIERA's coordinator of media relations and public affairs, was elected president of the Mid-Missouri Chapter, Public Relations Society of America. This organization sponsors seminars and provides other professional development opportunities for members and non-members, awards college scholarships, and is involved in various community service activities. Seeney is a member of the staff at the Missouri Department of Natural Resources.

In July 1988, the EIERA, in cooperation with the German Marshall Fund, hosted Mr. Hans Dieter Schultz, Regional Planner and Environmental Analyst for the West German Ministry of the Environment. Mr. Schultz was here to examine Missouri's approach to solid waste-management and implementation of the EIERA Resource Recovery and Solid Waste Study.

### Upcoming Activities

In the coming year, the EIERA will concentrate on continuing or developing the following projects:

- solid waste/resource recovery study implementation;

- waste-minimization/waste-exchange program;
- the household hazardous waste project;
- the Missouri Assistance Program;
- soil and water conservation programs;
- solid-waste financing program;

- state revolving loan fund program; and
- the Hazardous Waste Study Update and Quality Assurance Evaluation.

These projects will form the core of EIERA activities, but will not be the full extent of projects to be addressed in the coming year.





# EIERA Programs and Financial Services

**REGISTERED**

**NUMBER**

**R-**

**UNITED STATES OF AMERICA  
STATE OF MISSOURI**

**STATE ENVIRONMENTAL IMPROVEMENT AND  
ENERGY RESOURCES AUTHORITY**

**COMMUNITY DEVELOPMENT NOTE**

**(WATER AND WASTE DISPOSAL POLLUTION CONTROL PROGRAM)**

**SERIES 1988**

**RATE OF INTEREST**

**MATURITY DATE**  
June 15, 1991

**DATED DATE**  
June 15, 1988

**CUSIP**  
606813 AA 9

**REGISTERED OWNER:**

**PRINCIPAL AMOUNT:**

**DOLLARS**

**CERTIFICATE OF AUTHENTICATION**  
This Note is one of the Notes described in the within-mentioned Indenture.  
**MERCANTILE BANK N.A.,**  
St. Louis, Missouri,  
as Trustee and Note Registrar

**By**

**SPECIMEN**

**Authorized Signatory**

**SEAL**

**ATTEST:**

**STATE ENVIRONMENTAL IMPROVEMENT  
AND ENERGY RESOURCES AUTHORITY**

**Chairman**

**Secretary**

The Environmental Improvement and Energy Resources Authority assists Missouri communities, as well as public and private companies, in financing projects at the lowest possible cost. To meet this objective, the authority's mandate is broad and includes financing projects through tax-exempt bonds, conducting studies, and providing technical assistance in the field.

The EIERA can offer assistance through several types of tax-exempt and taxable financing; these programs are regulated by federal and state laws and may consist of the following:

- Issuance of Commercial Paper;
- Issuance of Floating or Fixed-Rate Notes;
- Issuance of Short- to Intermediate-Term Bonds;
- Issuance of Long-Term Bonds;
- Pooled Financings; and
- Issuance of Taxable Bonds.

The EIERA also provides low-cost construction financing for water- and wastewater-treatment facilities and sanitary sewage projects that are expecting to receive funds from the U.S. Environmental Protection Agency or Farmer's Home Administration.

In addition, the EIERA is developing alternative financing methods, making direct loans for feasibility studies, and issuing small project grants.

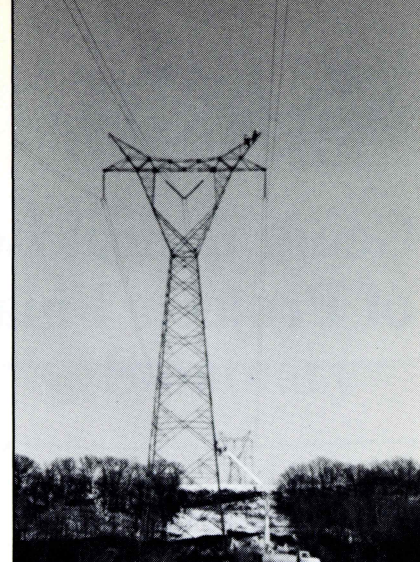
Along with direct financial assistance provided at the state level, Missouri's application of the sales/use tax exempts all air- and water-pollution control machinery and equipment from sales/use tax liabilities.

In addition to the state's efforts to reduce the cost of environmental compliance, Missouri's private financial institutions are encouraged to give special consideration to loans for pollution-control equipment, facilities, and projects.

The EIERA staff can advise prospective applicants in regard to financial options currently being offered.



# Projects Financed in Fiscal Year 1988



## Bond or Bond-Related Financings

	<u>Location</u>	<u>Amt. Financed</u>
Construction Advance Program	Various Municipalities Statewide	<u>\$15,000,000</u>
TOTAL:		<u><u>\$15,000,000</u></u>

## Other Project Financings and Assistance

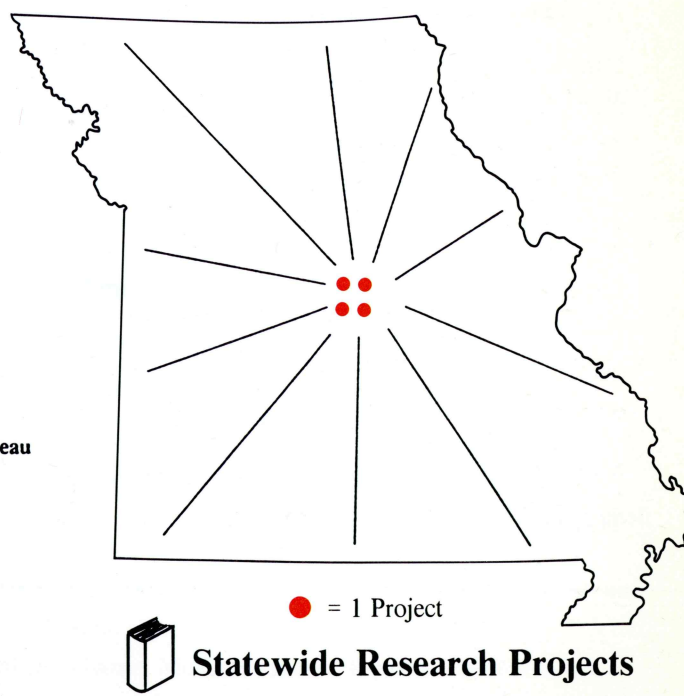
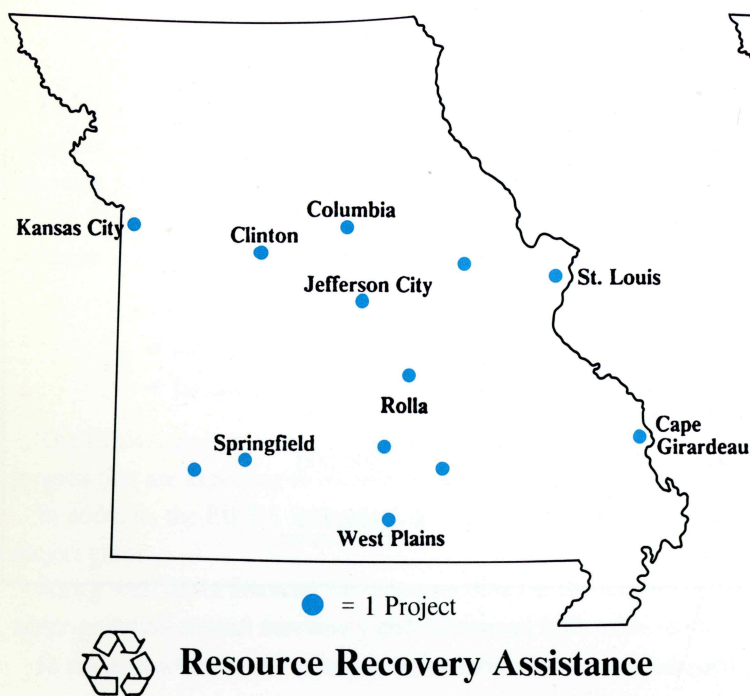
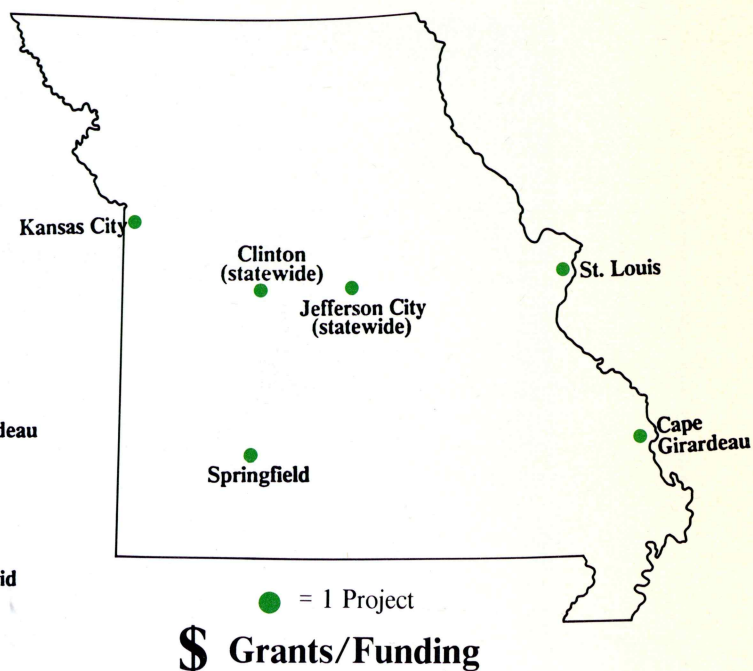
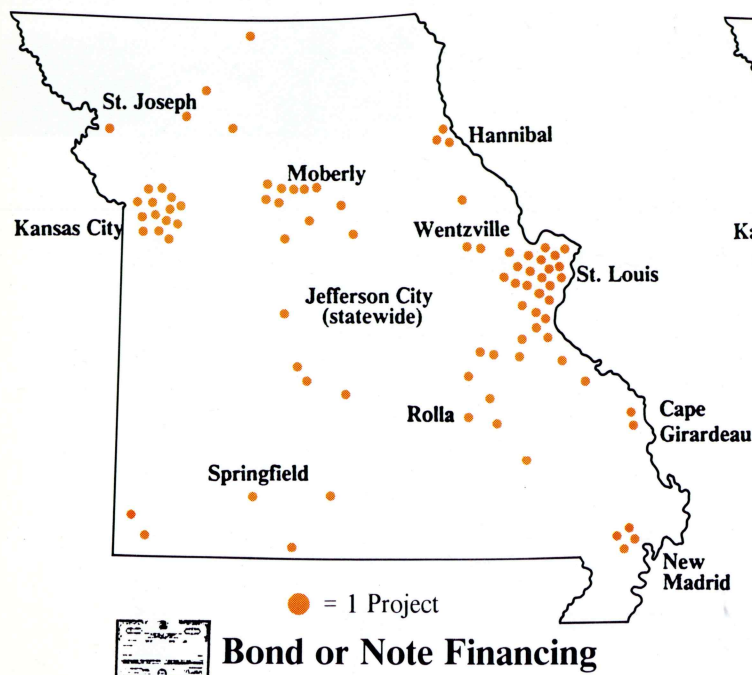
	<u>Location</u>	<u>Amount</u>
Grant Anticipation Note Program Rebates	26 Missouri Municipalities	\$ 130,730 (rebated)
Waste Minimization Training Program	Statewide	66,000
Missouri's Cooperative Program with the Industrial Materials Exchange Service	Statewide	12,000
Project Grants to the Household Hazardous Waste Program	Springfield-Greene County and 23 southwest-Missouri communities	163,000
Project Grants to the Missouri Assistance Program	Statewide	124,000
Project Grants to the Wright County Soil and Water Conservation District	Wright County and Statewide	70,000
Statewide Solid Waste Public Opinion Survey	Statewide	37,000
Statewide Solid Waste/Resource Recovery Study	Statewide	<u>500,000</u>
TOTAL:		<u><u>\$ 1,102,730</u></u>



# Geographical Locations of Projects Financed

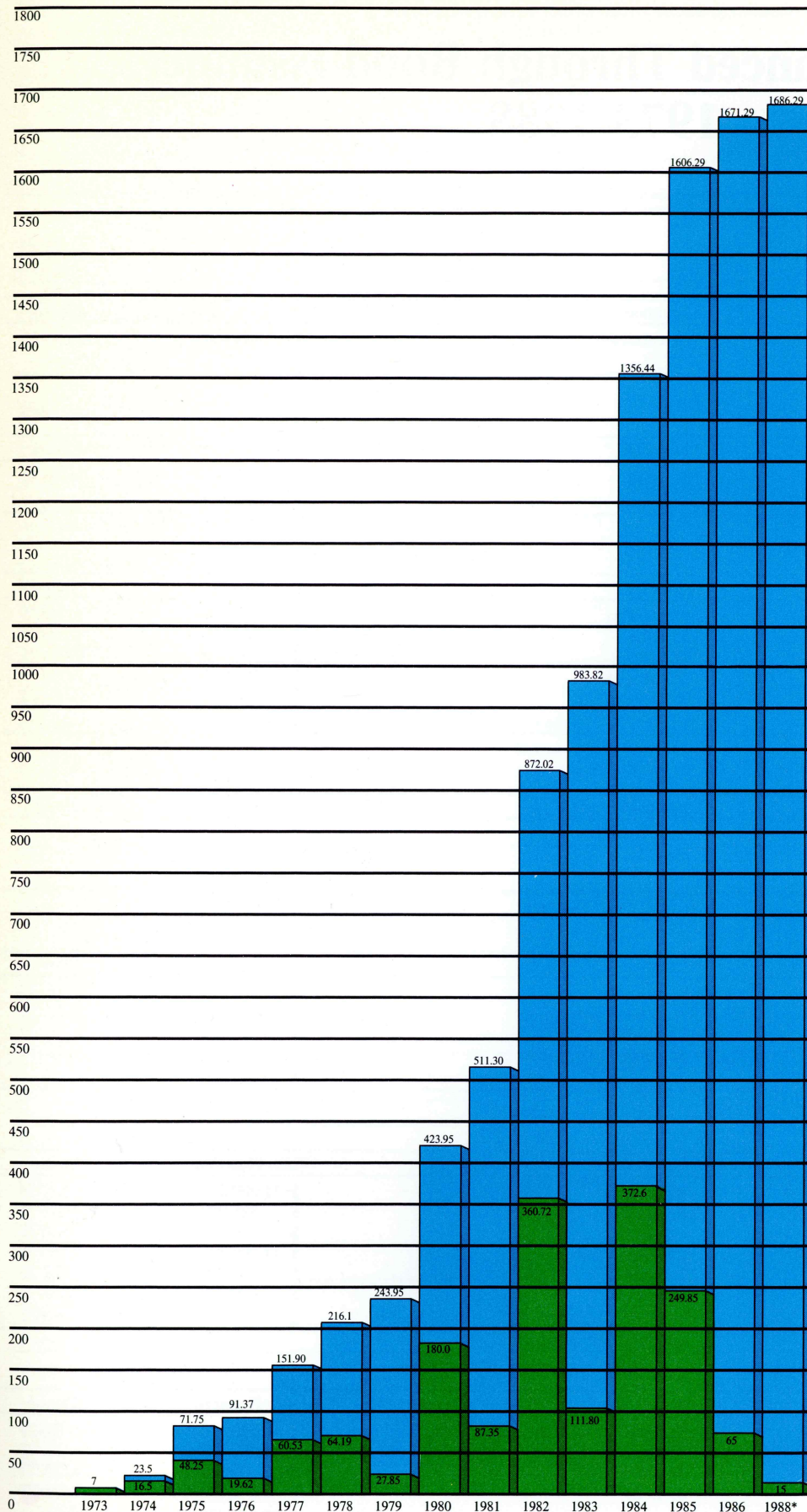
## Key

- Bond or Note Financing
- Grants/Funding
- Resource Recovery Assistance
- Statewide Research Projects





(\$ millions)



\* Encompasses Fiscal Year July 1, 1987 through June 30, 1988

## Summary of Bond Issuances

### Key

- Annual Figures
- Cumulative Totals



# Projects Financed Through Bond Issuances 1973-1988

## 1973

Project	Location	Amt. Financed	Closed
St. Joe Minerals Corp.	Herculaneum	\$ 7,000,000	12/20/73
TOTAL:		\$ 7,000,000	

## 1974

Project	Location	Amt. Financed	Closed
Union Electric Co.	St. Louis	\$ 16,500,000	4/25/74
TOTAL:		\$ 16,500,000	

## 1975

Project	Location	Amt. Financed	Closed
Mobay Chemical Corp.	Kansas City	\$ 7,500,000	4/18/75
Alpha Portland Industries, Inc.	St. Louis	\$ 1,900,000	4/29/75
Union Electric Co.	St. Louis	\$ 22,000,000	6/11/75
Mobay Chemical Corp.	Kansas City	\$ 3,500,000	9/11/75
Armco Corp.	Kansas City	\$ 13,350,000	12/17/75
TOTAL:		\$ 48,250,000	

## 1976

Project	Location	Amt. Financed	Closed
Noranda Aluminum Co.	New Madrid	\$ 10,500,000	4/27/76
American Cyanamid Co.	Hannibal	\$ 9,120,000	12/01/76
TOTAL:		\$ 19,620,000	

## 1977

Project	Location	Amt. Financed	Closed
Standard Oil (AMOCO) Co.	Kansas City	\$ 6,450,000	2/16/77
Great Lakes Carbon Corp.	St. Louis	\$ 7,000,000	9/14/77
Kansas City Power & Light Co.	Kansas City	\$ 20,000,000	10/26/77
Union Electric Co.	St. Louis	\$ 27,085,000	11/01/77
TOTAL:		\$ 60,535,000	

## 1978

Project	Location	Amt. Financed	Closed
Mobay Chemical Corp.	Kansas City	\$ 11,000,000	3/15/78
Mobay Chemical Corp.	Kansas City	\$ 825,000	5/10/78
Kansas City Power & Light Co.	Kansas City	\$ 31,000,000	7/19/78
Gulf+Western Industries, Inc.	Cape Girardeau	\$ 11,000,000	8/01/78
Monsanto Co.	St. Louis	\$ 2,370,000	8/03/78
Empire District Electric Co.	Kansas City	\$ 8,000,000	12/20/78
TOTAL:		\$ 64,195,000	

## 1979

Project	Location	Amt. Financed	Closed
Monsanto Co.	St. Louis	\$ 10,250,000	1/09/79
Mobay Chemical Corp.	Kansas City	\$ 11,000,000	4/18/79
American Cyanamid Co.	Hannibal	\$ 3,700,000	8/30/79
Monsanto Co. (Queeny Plant)	St. Louis	\$ 2,900,000	9/06/79
TOTAL:		\$ 27,850,000	



**1980**

Project	Location	Amt. Financed	Closed
Associated Electric Cooperative, Inc.	Thomas Hill	\$ 95,000,000	1/20/80
Alpha Portland Industries, Inc.	St. Louis	\$ 1,450,000	4/29/80
River Cement Co.	Festus	\$ 5,700,000	5/29/80
Standard Oil (AMOCO) Co.	Kansas City	\$ 8,300,000	7/22/80
Great Lakes Container Corp.	St. Louis	\$ 800,000	7/24/80
Union Electric Co.	St. Louis	\$ 60,000,000	8/20/80
American Cyanamid Co.	Hannibal	\$ 3,450,000	9/17/80
St. Joseph Light & Power Co.	St. Joseph	\$ 5,300,000	12/30/80
TOTAL:		\$180,000,000	

**1981**

Project	Location	Amt. Financed	Closed
Associated Electric Cooperative, Inc.	New Madrid	\$ 36,000,000	3/19/81
City of Wentzville (GM Plant)	Wentzville	\$ 6,350,000	5/08/81
Union Electric Co.	St. Louis	\$ 45,000,000	10/08/81
TOTAL:		\$ 87,350,000	

**1982**

Project	Location	Amt. Financed	Closed
Associated Electric Cooperative, Inc.	Thomas Hill	\$ 71,000,000	1/02/82
Associated Electric Cooperative, Inc.	Thomas Hill	\$ 50,000,000	2/21/82
Associated Electric Cooperative, Inc.	Thomas Hill	\$ 73,000,000	5/04/82
Associated Electric Cooperative, Inc.	Thomas Hill	\$ 12,000,000	8/18/82
Noranda Aluminum, Inc.	New Madrid	\$ 45,000,000	10/29/82
Union Electric Co.	St. Louis	\$ 20,000,000	12/15/82
Monsanto Co.	St. Louis	\$ 9,325,000	12/15/82
Associated Electric Cooperative, Inc.	Thomas Hill	\$ 55,900,000	12/16/82
Grant Anticipation Notes, 1982	various locations	\$ 24,500,000	12/16/82
TOTAL:		\$360,725,000	

**1983**

Project	Location	Amt. Financed	Closed
St. Joseph Light & Power Co.	Kansas City	\$ 5,600,000	2/24/83
Community Development Program, 1983	various municipalities	\$ 18,000,000	10/27/83
Grant Anticipation Notes, 1983	various municipalities	\$ 44,100,000	11/17/83
Associated Electric Cooperative, Inc.	New Madrid	\$ 44,100,000	12/15/83
TOTAL:		\$111,800,000	

**1984**

Project	Location	Amt. Financed	Closed
Union Electric Co.	St. Louis	\$160,000,000	6/21/84
Lone Star Industries, Inc.	Cape Girardeau	\$ 9,100,000	7/17/84
Monsanto Co.	St. Louis	\$ 2,890,000	11/08/84
Union Electric Co.	St. Louis	\$ 47,500,000	11/14/84
Associated Electric Cooperative, Inc.	Thomas Hill	\$153,125,000	11/15/84
TOTAL:		\$372,615,000	

**1985**

Project	Location	Amt. Financed	Closed
Union Electric Co.	St. Louis	\$126,500,000	4/24/85
Community Development Program, 1985	various municipalities	\$ 15,000,000	6/11/85
Grant Anticipation Notes, 1985	various municipalities	\$ 90,000,000	7/09/85
Chrysler Corp.	St. Louis	\$ 16,000,000	10/30/85
Mobay Chemical Corp.	Kansas City	\$ 1,600,000	12/05/85
Reynolds Metals Co.	Kansas City	\$ 750,000	12/31/85
TOTAL:		\$249,850,000	

**1986**

Project	Location	Amt. Financed	Closed
Grant Anticipation Notes, 1986	various municipalities	\$ 65,000,000	7/15/86
TOTAL:		\$ 65,000,000	

**1988**

Project	Location	Amt. Financed	Closed
Community Development Note Program, 1988	various municipalities	\$ 15,000,000	6/15/88
TOTAL:		\$ 15,000,000	



# Photograph Identification

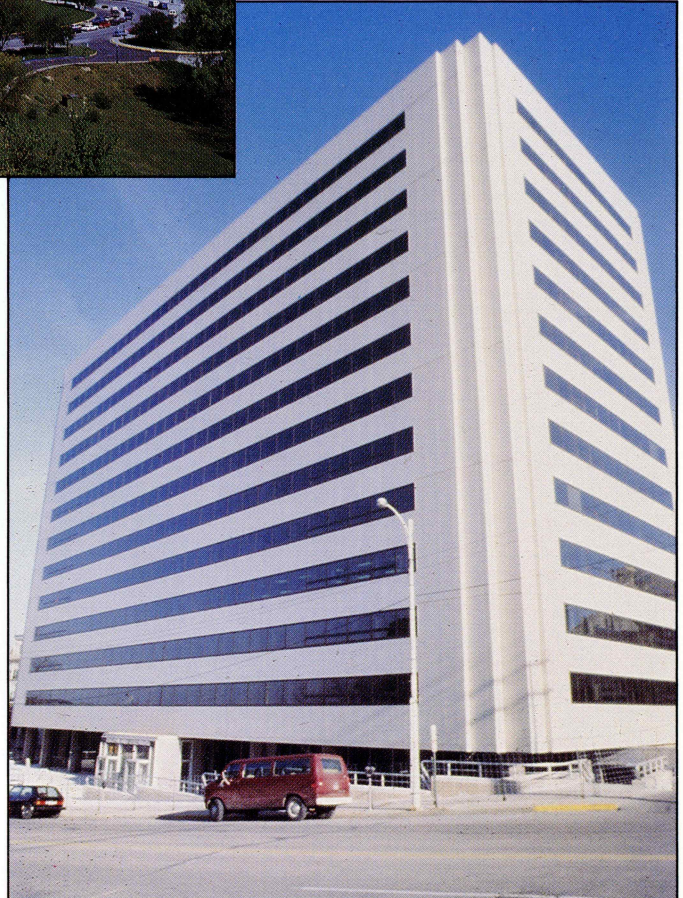
PAGE	SUBJECT	PAGE	SUBJECT
Front Cover	Blue Springs Road near the Meramec River in Crawford County	11	(upper) Fact sheets — Anthony Commission and the Council of Pollution Control Financing Agencies (CPCFA) Conference (lower) Spring Branch, Ha Ha Tonka State Park
1	(upper) Brochures — Household Hazardous Waste Project, Springfield (lower) Lake of the Ozarks near Sunrise Beach	12	(upper) Recycling bin, Westside Community Recycling Center, Springfield (lower) Drop-off bin, Midwest Fibre Co., Springfield
6	Curbside recycling project, Kansas City	13	(upper) Windrows at the University City composting site (lower) Curbside leaf collection, University City
7	(upper) Watertower, M.A.P. Project (lower) Metal services cooling tower and water treatment system, New Madrid	14	EIERA financial bond certificate
8	(upper) Pulltight Spring on the Current River (lower) Household chemicals, Household Hazardous Waste Project, Springfield	15	Transmission line atop a 169-foot steel tower, 40 miles northwest of St. Joseph
9	(upper photos) Sewage irrigation treatment plant, Harrisburg (lower) Recycling bin, Midwest Fibre Co., Springfield	20	Dillard Mill in Crawford County
10	(upper) Seven-volume EIERA Resource Recovery Feasibility and Planning Study (lower) Brochures — Waste minimization seminar and Missouri Waste Exchange Program	Inside Cover	Jefferson State Office Building, Jefferson City





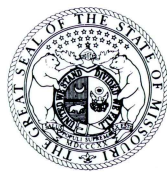
---

*The offices of the EI ERA are housed on the 12th floor  
of the Jefferson Building, one block from the state  
capitol in downtown Jefferson City.*





**State Environmental Improvement and Energy Resources Authority**



**Missouri Department of Natural Resources**